

## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/775,501  
Source: IFWB  
Date Processed by STIC: 7/21/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):  
U.S. Patent and Trademark Office, 220 20<sup>th</sup> Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby,  
Room 1B03, Arlington, VA 22202

Revised 05/17/04



IFWO

## RAW SEQUENCE LISTING

DATE: 07/21/2004

PATENT APPLICATION: US/10/775,501

TIME: 09:21:34

Input Set : A:\84500-1.app

Output Set: N:\CRF4\07212004\J775501.raw

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 4 Enattah, Nabil  
 5 Jaervelae, Irma  
 6 Sahi, Timo  
 7 Savilahti, Erkki  
 8 Terwilliger, Joseph  
 9 National Public Health Institute  
 11 <120> TITLE OF INVENTION: Identification of a DNA Variant Associated With Adult  
 12 Type Hypolactasia  
 14 <130> FILE REFERENCE: 084500-000100US  
 16 <140> CURRENT APPLICATION NUMBER: US 10/775,501  
 17 <141> CURRENT FILING DATE: 2004-02-09  
 19 <150> PRIOR APPLICATION NUMBER: EP 01119377.8  
 20 <151> PRIOR FILING DATE: 2001-08-10  
 22 <150> PRIOR APPLICATION NUMBER: EP 01119528.6  
 23 <151> PRIOR FILING DATE: 2001-08-14  
 25 <150> PRIOR APPLICATION NUMBER: US 60/315,955  
 26 <151> PRIOR FILING DATE: 2001-08-31  
 28 <150> PRIOR APPLICATION NUMBER: WO PCT/EP02/08963  
 29 <151> PRIOR FILING DATE: 2002-08-09  
 31 <160> NUMBER OF SEQ ID NOS: 17  
 33 <170> SOFTWARE: PatentIn Ver. 2.1  
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 36 <211> LENGTH: 180  
 37 <212> TYPE: DNA  
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 41 <223> OTHER INFORMATION: sequence comprised in the sequence of lactase  
 42 persistence type intron 13 of the MCM6 gene  
 43 comprising the single nucleotide polymorphism  
 44 (SNP) t substituted by c at position -13910 5'  
 45 <220> from the intestinal lactase-phlorizine  
 46 <223> hydrolase (LPH) gene  
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 56 <212> TYPE: DNA  
 57 <213> ORGANISM: Homo sapiens  
 59 <220> FEATURE:  
 60 <223> OTHER INFORMATION: sequence comprised in the sequence of lactase

(pg.6)

Does Not Comply  
Corrected Diskette Needed

(pg.1-5)

mandatory in  
 Section <223>  
 you must  
 not exceed  
 4 lines.

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Input Set : A:\84500-1.app

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61 persistence type intron 9 of the MCM6 gene  
 62 comprising the single nucleotide polymorphism  
 63 (SNP) a substituted by g at position -13910 5'  
 W--> 64 <sup>(220)</sup> from the intestinal lactase-phlorizine  
 W--> 65 <sup>(223)</sup> hydrolase (LPH) gene  
 67 <400> SEQUENCE: 2  
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 74 <211> LENGTH: 3213  
 75 <212> TYPE: DNA  
 76 <213> ORGANISM: Homo sapiens  
 78 <220> FEATURE:  
 79 <223> OTHER INFORMATION: sequence of lactase persistence type intron 13 of  
 80 the MCM6 gene comprising the single nucleotide  
 81 polymorphism (SNP) t substituted by c at position  
 82 <sup>(220)</sup> -13910 5' from the intestinal lactase-phlorizine  
 W--> 83 <sup>(223)</sup> hydrolase (LPH) gene  
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*allowed in*  
*section.*  
*(223)*

*same error*

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Input Set : A:\84500-1.app

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142 &lt;210&gt; SEQ ID NO: 4

143 &lt;211&gt; LENGTH: 1296

144 &lt;212&gt; TYPE: DNA

145 &lt;213&gt; ORGANISM: Homo sapiens

147 &lt;220&gt; FEATURE:

148 &lt;223&gt; OTHER INFORMATION: sequence of lactase persistence type intron 9 of

149 the MCM6 gene comprising the single nucleotide

150 polymorphism (SNP) a substituted by g at position

151 -22018 5' from the intestinal lactase-phlorizine

W--> 152 <sup>2203</sup>~~223~~ hydrolase (LPH) gene

154 &lt;400&gt; SEQUENCE: 4

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← SAME  
error

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185 <223> OTHER INFORMATION: sequence of lactase persistence type intron 13 of
186 the MCM6 gene comprising the single nucleotide
187 polymorphism (SNP) t substituted by c at position
188 -13910 5' from the intestinal lactase-phlorizine
W--> 189 {220} {223} hydrolase (LPH) gene
191 <400> SEQUENCE: 5
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← Same  
error

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Output Set : N:\CRF4\07212004\J775501.raw

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248 &lt;210&gt; SEQ ID NO: 6

249 &lt;211&gt; LENGTH: 1296

250 &lt;212&gt; TYPE: DNA

251 &lt;213&gt; ORGANISM: Homo sapiens

253 &lt;220&gt; FEATURE:

254 &lt;223&gt; OTHER INFORMATION: sequence of lactase persistence type intron 9 of

255 the MCM6 gene comprising the single nucleotide

256 polymorphism (SNP) a substituted by g at position

257 -22018 5' from the intestinal lactase-phlorizine

W--&gt; 258 {223} hydrolase (LPH) gene

260 &lt;400&gt; SEQUENCE: 6

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← SAME  
error

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/775,501

DATE: 07/21/2004  
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Input Set : A:\84500-1.app  
Output Set: N:\CRF4\07212004\J775501.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:7; N Pos. 1  
Seq#:9; N Pos. 1  
Seq#:11; N Pos. 1  
Seq#:13; N Pos. 1  
Seq#:15; N Pos. 1

## VERIFICATION SUMMARY

DATE: 07/21/2004

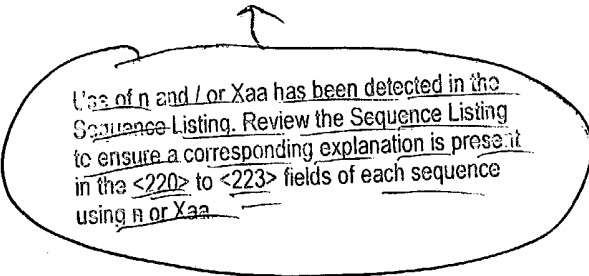
PATENT APPLICATION: US/10/775,501

TIME: 09:21:35

Input Set : A:\84500-1.app

Output Set: N:\CRF4\07212004\J775501.raw

L:45 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
L:46 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
L:64 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
L:65 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
L:83 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
L:152 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
L:189 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
L:258 M:259 W: Allowed number of lines exceeded, <223> Other Information:  
L:301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:334 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:367 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
L:400 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0  
L:431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0



Use of n and / or Xaa has been detected in the  
Sequence Listing. Review the Sequence Listing  
to ensure a corresponding explanation is present  
in the <220> to <223> fields of each sequence  
using n or Xaa.